# Pension Funds & Investments Legislative Finance Committee November 18, 2008

Presented by: Carroll South, Executive Director Montana Board of Investments

#### Capital Markets Review As of September 30, 2008

#### Capital Markets Review

#### Third Quarter Market Environment

In a dramatic flight to quality and repricing of global investment risk, the credit and liquidity crisis gripped all markets during the third quarter and sent volatility skyward. In the quarter's final month, markets witnessed the largest bankruptcy in U.S. history and unprecedented market intervention by the Federal Reserve and U.S. Treasury. Famile Mae and Freddie Mae were taken over by the government, Lehman Brothers filed for bankruptcy protection, the government took control of AIG in exchange for an \$85 billion loan, Merrill Lynch and Wachovia were sold, and Washington Mutual was seized by federal regulators. Lehman's bankruptcy, on September 15, provided the catalyst for a late-quarter intensification of the credit crisis, as lending between banks ground to a halt and corporate borrowing costs soared (for those corporations that could obtain credit at all). By the time a hasty effort on the part of U.S. regulators to secure passage of a rescue plan ultimately failed on September 29, the Dow suffered its largest point decline in history, before a 5% rebound on the quarter's last trading day. Concerns for global demand sent commodity prices, particularly oil (which declined 28%), downward.

#### Third Quarter Equities

Markets around the world saw significant declines in the third quarter, based on a combination of a flight to quality given the credit and liquidity crisis, and on greater concerns of an economic slowdown. Commodity-rich and export-dependent emerging markets equities led the decline, returning -27%, in parity with the decline in commodity prices. International small-cap equities declined by 24%, and international developed markets fell by 21%. Within the domestic equity market, small-cap value securities provided the sole source of positive returns as every other market segment declined, led downward by large-cap growth. The economic sectors that had shown the most resiliency during the first half of the year saw the greatest declines in the third quarter, as energy and materials declined by 25% and 22%, respectively. Financial stocks, despite significant volatility, ended the quarter marginally positive, as the smaller and healthier banks posted gains. Consumer staples, long considered a recession hedge, posted the domestic market's greatest gains at 5%.

#### Third Quarter Fixed Income

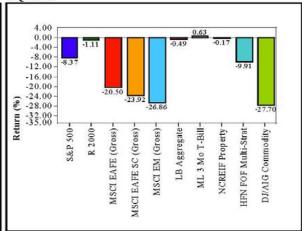
In the quarter's flight to quality, every broad segment of the fixed income market except for short-term Treasury bills, fixed-rate mortgage-backed securities, and agency securities posted negative returns. Investors preference for the very safest securities, short-term Treasuries, caused their prices to rise to such a level that, several times toward the end of the quarter, their yields turned negative --indicating that investors were willing to accept a small, known loss as the price of avoiding all uncertainty. At the same time, yields for any fixed income security that included default, interest-rate, or any other risk soared as their prices collapsed. Longer-term Treasury securities saw a selloff, partially because of fears that the \$700 billion in new debt expected to be issued by a government rescue plan would cause their prices to fall.

#### **Trailing-Period Performance**

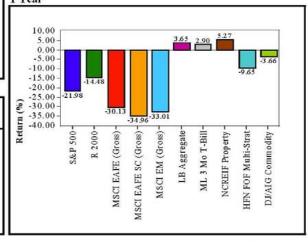
	1 Month Ending Jul-2008	1 Month Ending Aug-2008	1 Month	1 Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years
S&P 500	-0.84	1.45	-8.91	-8.37	-19.29	-21.98	0.22	5.17	3.06
R 2000	3.70	3.61	-7.97	-1.11	-10.38	-14.48	1.83	8.15	7.81
MSCI EAFE (Gross)	-3.20	-4.03	-14.42	-20.50	-28.91	-30.13	1.58	10.16	5.42
MSCI EAFE SC (Gross)	-4.56	-3.83	-17.12	-23.92	-31.68	-34.96	-3.54	9.56	N/A
MSCI EM (Gross)	-3.69	-7.95	-17.49	-26.86	-35.37	-33.01	8.69	19.05	14.77
LB Aggregate	-0.08	0.95	-1.34	-0.49	0.63	3.65	4.15	3.78	5.20
ML 3 Mo T-Bill	0.18	0.15	0.30	0.63	1.83	2.90	4.20	3.26	3.55
NCREIF Property	N/A	N/A	N/A	-0.17	1.99	5.27	13.24	14.24	11.83
HFN FOF Multi-Strat	-2.56	-1.64	-6.00	-9.91	-11.58	-9.65	2.84	4.81	8.03
DJ/AIG Commodity	-11.85	-7.28	-11.53	-27.70	-8.01	-3.66	1.90	10.15	9.98

Performance is annualized for periods greater than one year.

#### 1 Quarter

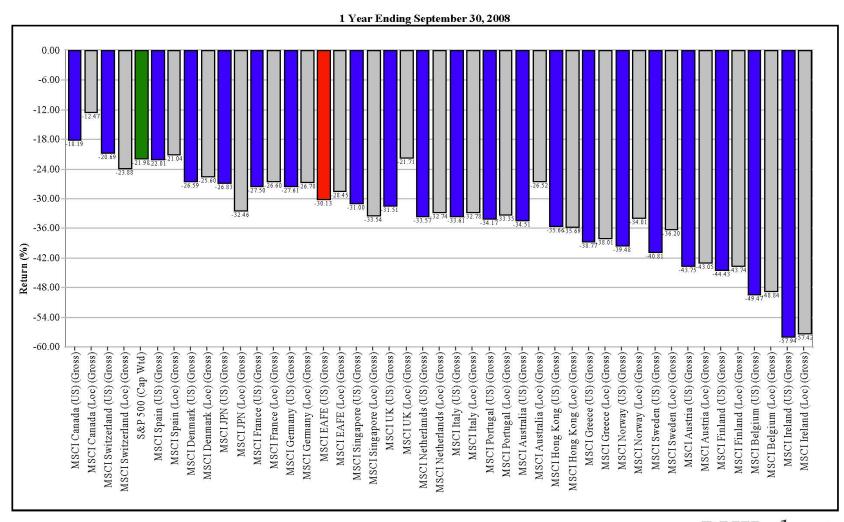


# 1 Year





### International Equity Market Performance As of September 30, 2008



# Annual Asset Class Performance As of September 30, 2008

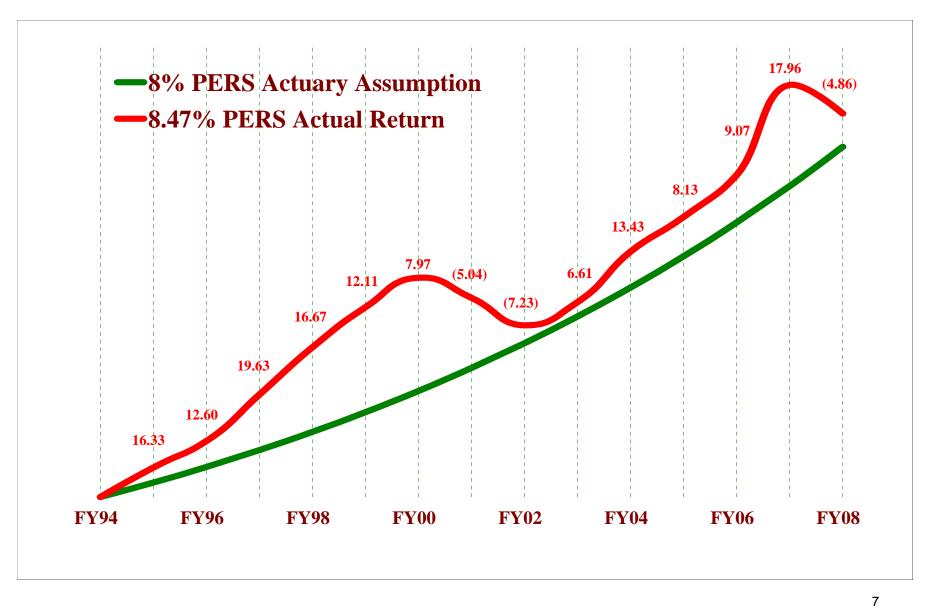
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	YTD
Best	16.61%	37.58%	23.17%	33.36%	28.58%	66.42%	31.84%	8.44%	25.91%	62.14%	31.27%	34.54%	32.59%	39.78%	1.99%
	8.06%	29.95%	22.96%	22.36%	20.34%	27.31%	16.16%	7.89%	16.56%	56.28%	25.95%	26.65%	26.86%	16.23%	1.83%
	6.39%	28.44%	17.38%	17.65%	16.24%	24.69%	13.15%	7.29%	14.81%	47.25%	20.70%	21.36%	19.67%	15.83%	1.17%
	4.19%	19.17%	16.49%	14.52%	11.77%	24.35%	12.40%	7.28%	10.25%	39.17%	18.33%	20.06%	18.37%	11.63%	0.63%
	1.32%	18.47%	11.35%	13.90%	8.69%	21.26%	12.24%	6.61%	6.74%	28.97%	14.48%	14.02%	16.59%	11.63%	-4.09%
	0.62%	15.21%	10.31%	12.76%	5.23%	21.04%	11.63%	5.28%	3.12%	28.68%	11.13%	6.75%	15.80%	9.91%	-8.01%
	-1.03%	13.54%	6.34%	9.65%	3.94%	20.19%	6.18%	4.42%	1.78%	23.93%	10.88%	5.33%	11.85%	6.97%	-10.08%
	-1.82%	11.55%	6.04%	5.33%	3.75%	11.36%	-3.02%	2.49%	-1.41%	11.93%	9.15%	4.91%	9.85%	6.60%	-10.38%
	-2,92%	7.54%	5.30%	2.05%	1.87%	4.85%	-5.86%	-2.37%	-6.00%	8.99%	8.56%	4.55%	4.85%	5.49%	-11.58%
	-7.10%	6.03%	3.63%	-3.39%	-2.55%	2.40%	-7.22%	-11.89%	-7.44%	8.39%	8.46%	3.07%	4.33%	5.00%	-19.29%
	-7.31%	-5.21%	0.14%	-11.60%	-25.33%	2.39%	-9.10%	-12.11%	-15.66%	5.87%	6.79%	2.84%	2.71%	1.87%	-28.91%
	N/A	N/A	N/A	N/A	-27.03%	-0.82%	-13.96%	-19.51%	-20.48%	4.10%	4.34%	2.74%	2.07%	1.79%	-31.68%
Worst	N/A	N/A	N/A	N/A	N/A	-7.65%	-30.61%	-21.21%	-22.10%	1.15%	1.33%	2.43%	0.41%	-1.57%	-35.37%
	S&P 500 US Large Cap	R 2000 US Sma Cap	FoAs I	E EAF	E S m E ap oss) - Em		LB Agg lond - F1	LB US Corp: Hi Yield - FI	LB US Treasury US TIPS FI	I diti Lo	Prope Re:	rty - al Ho		ommod	ML3 Mo T-Bill - Cash Equiv

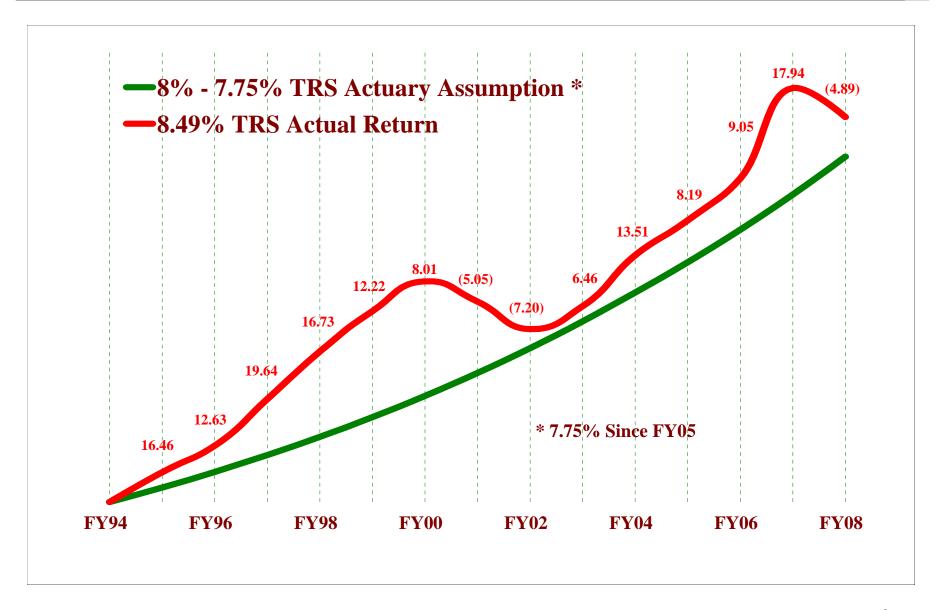


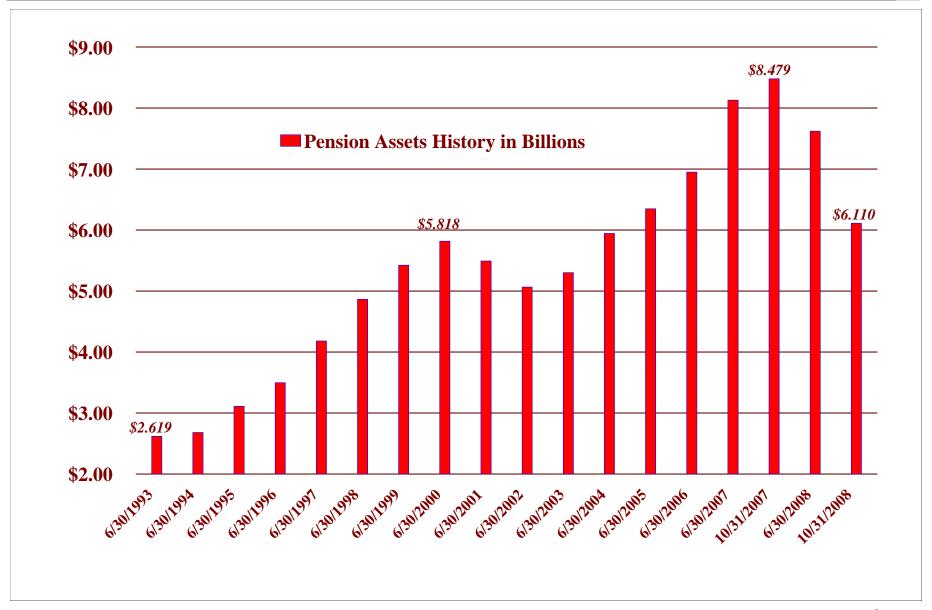
<HELP> for explanation. Index COMP Hit 1<GO> for Options, Hit ⟨Page⟩ for table. COMPARATIVE RETURNS Page 1/ 8 Period Daily 137 Day Period Range 6/30/08 -Securities Prc Appr Total Ret Difference Annual Eq Crncy -32.42 % SPR Index -31.80 % 11.03 % -63.92 % -43.35 % -42.83 % -77.46 % MXWDU Index 3 (\* = No dividends or coupons) 0 -10 -20 -30 -S&P 1500 Composite Index MSCI ACWI XUSA -50 11JUL08 25 8AUG 5SEP 22 19 30CT 17 14N0V Australia 61 2 9777 8600 Brazil 5511 3048 4500 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000 Singapore 65 6212 1000 Copuright 2008 Bloomberg Finance L.P. Japan 81 3 3201 8900 U.S. 1 212 318 2000

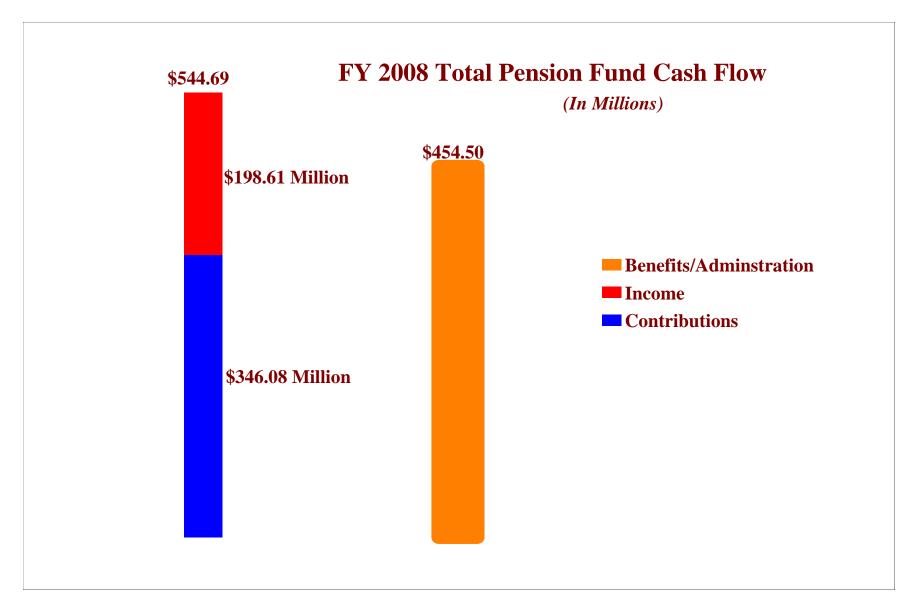
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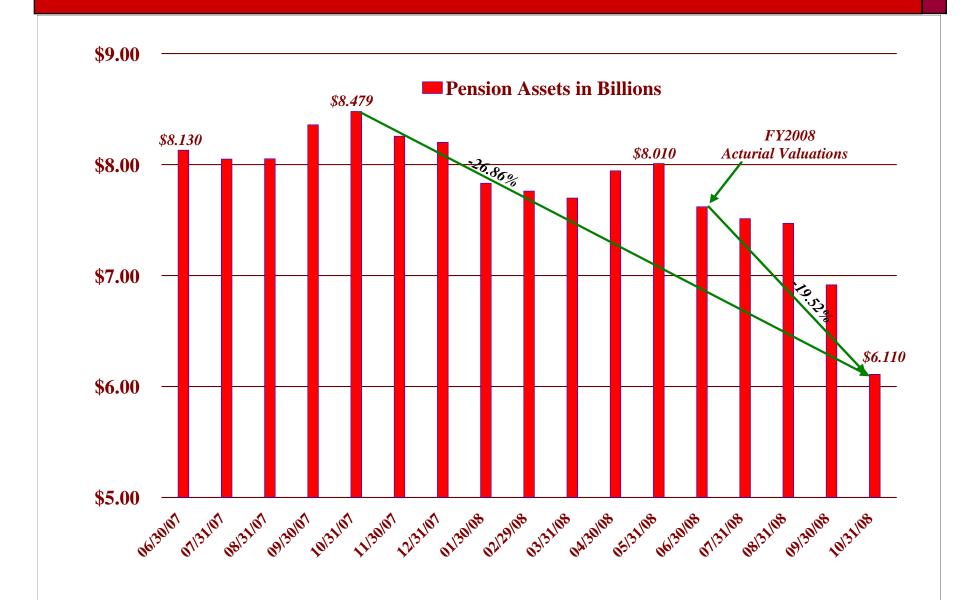


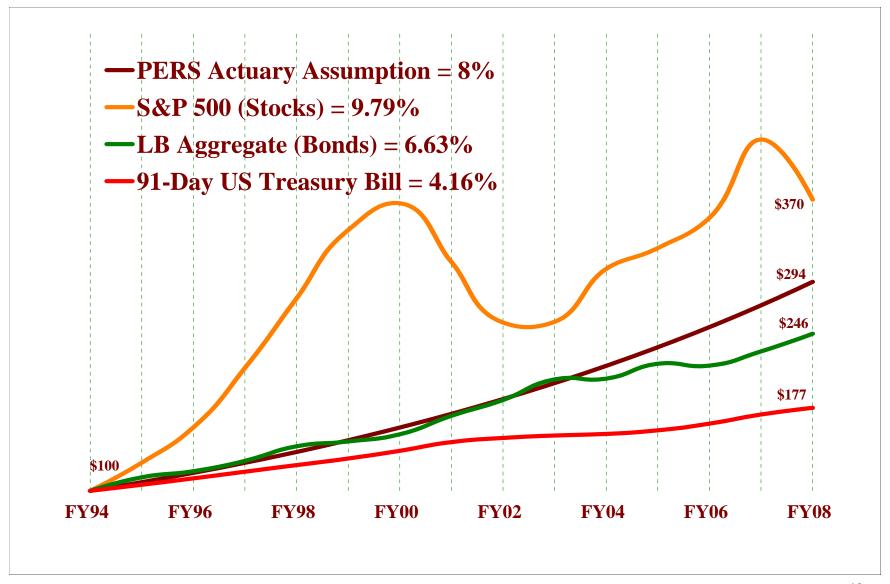












Graph 1 Wealth Indices of Investments In the U.S. Capital Markets (Year-end 1925 = \$1.00)

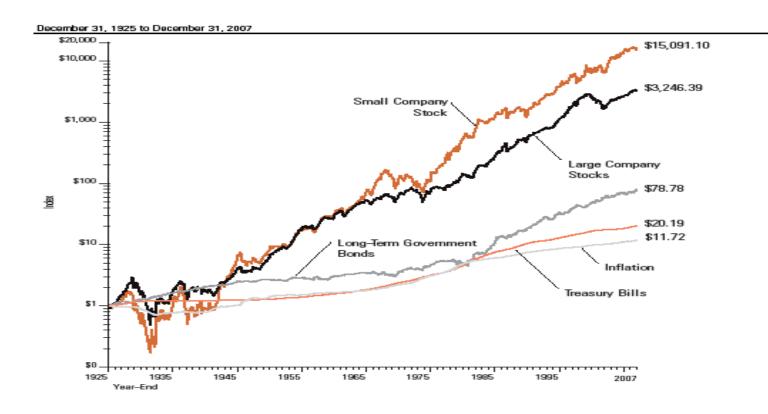


Table 7

# Basic Series and Portfolios: Summary Statistics of Annual Total Returns in Percent

	1/1/26 to 12/31/07							
Asset Class	Geometric Mean	Arithmetic Mean	Standard Deviation					
Large Company Stocks	10.4	12.3	20.0					
Small Company Stocks	12.5	17.1	32.6					
Long-Term Corporate Bonds	5.9	6.2	8.4					
Long-Term Government Bonds	5.5	5.8	9.2					
Intermediate-Term Government Bonds	5.3	5.5	5.7					
U.S. Treasury Bills	3.7	3.8	3.1					
Inflation	3.0	3.1	4.2					
90% Stocks/10% Bonds	10.1	11.6	18.0					
70% Stocks/30% Bonds	9.3	10.3	14.5					
50% Stocks/50% Bonds	8.4	9.0	11.4					
30% Stocks/70% Bonds	7.3	7.7	9.3					
10% Stocks/90% Bonds	6.1	6.5	8.7					